

evident intention to assume responsibility, in nearly all instances, for the particular way each group is treated.

The illustrations include a large percentage of the taxa. They are all line drawings and seem to be particularly well done. On the large pages they mostly stand out very clear. The author wisely, when good illustrations have been available, has borrowed them with due acknowledgment. Usually they are placed near to the keys and descriptions but a minor deficiency is the lack of any reference to a figure in the keys or the writeup.

A comment which could apply equally to certain other recent floras or manuals concerns the handling of the two genera, *Crataegus* and *Rubus*. In *Crataegus*, Steyermark has followed recent custom and doubtless his own inclination in accepting the treatment of Dr. E. J. Palmer. The result is a sizeable aggregation of 50 species and many varieties. In *Rubus*, he seems to have done considerable pruning away of superfluous taxa much as Gleason and Cronquist did in their recent manual but nonetheless accepting some ideas about the blackberries from Fernald in Gray's Manual. One might hope that someone will make a more realistic treatment of *Crataegus*.

Certainly in most respects here is a magnificent state flora of about the magnitude of a manual. Dr. Steyermark is to be congratulated for having completed such a monumental task.

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## HYDRASTIS CANADENSIS L., IN NEW ENGLAND

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The Golden Seal or Orange Root is a rare plant in New England where it attains its northeasterly limits of distribution in Vermont and Connecticut.

In Connecticut it is recorded in the literature (Bissell 1900, Knowlton et al. 1918 and Bean et al. 1960) from the base of Meriden Mountain in Southington on the authority



of E. R. Newall in 1897 and in Plainville on the authority of J. N. Bishop.

In Vermont it is known from Shelburne and Weybridge (Brainerd et al. 1900, 1915; Flynn 1911, 1935 and Dole 1937). It is not known if these stations persist as the early botanists left no precise information which would enable succeeding botanists to relocate them and, from all indications, the colonies appear to have been very small. More recently the species was reported to me by Miss Joyce Bates of Burlington, Vt., as growing in considerable numbers at a station in Orwell. All of these Vermont stations border on, or are in very close proximity to the eastern shores of Lake Champlain. The record for this plant in Wells River cited by Dole (1937) is dubious inasmuch as it is unsupported by an herbarium specimen. As the Orwell station proves to be an extensive one wherein plants can be counted in the hundreds and represent the first collection of the species, in a wild state, in New England in sixty years it is deemed worthy of a special record.

On 18 May 1963, in company with Miss Bates and Mr. John Daniels, I visited the Orwell station. By actual pacing of the colony, located in a clearing of mixed wood dominated by beech and maple, it was found to occupy an area of 60 x 90 feet. At this time the plants were at the height of flowering and formed an exceptionally dense colony of a thousand or more plants, so crowded in fact as to form a solid carpet of green. This colony has been known to Mr. Daniels for at least forty years and was known to his father before then. Mr. Daniels (1963) knew this colony as a youth, and recalls that the plants seemed shorter and the colony smaller in extent. There are additional scattered plants in this rich woodland not too distant from the large colony and Mr. Daniels has knowledge of at least four smaller colonies in other woodlands within a radius of from two to four miles from this colony.

No information has been recorded in the literature on the station in Weybridge. The discovery of the station in Shelburne, which is credited to a "bulb collector", has been recorded in some detail by Brainerd (1899 and 1901).



VERMONT. CHITTENDEN Co.: Shelburne, 8 August 1899, E. Brainerd, (VT), warm woodlands, 19 May 1903, C. G. Pringle, (VT); ADDISON Co.: Orwell, 4 July 1962, Miss Joyce A. Bates and John Daniels, s.n. the 3rd definitely known station in Vermont, (VT, NEBC), 18 May 1963, L. A. Charette (No. 2552), Miss Joyce A. Bates and John Daniels. (VT). Weybridge, 29 July 1902, W. W. Eggleston No. 2882 (GH, VT), 10 May 1903, E. Brainerd, (VT). CONNECTICUT. HARTFORD Co.: Plainville, rocky woods in rich soil, 12 May 1918, C. H. Bissell, (YU), rich woods along talus slopes, 8 May 1921, G. E. Nichols, (YU). Southington, rocky woods, rare, from foot of Hanging Hills off Savage St., 30 June 1898, C. H. Bissell, (YU), from plants in grounds of E. R. Newall of which roots had been transplanted from rich woods, 15 May 1899, C. H. Bissell, (YU). FAIRFIELD Co.: Easton, rich rather dry upland woods, well established from cultivated area, 9 July 1932, H. H. Taylor, (YU).

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